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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/565,317

01/19/2006

Brian Smith

1995.74509

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24978 7590 03/02/2009  
GREER, BURNS & CRAIN  
300 S WACKER DR  
25TH FLOOR  
CHICAGO, IL 60606

EXAMINER

EPPEL, BRYAN L

ART UNIT

PAPER NUMBER

3635

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DELIVERY MODE

03/02/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/565,317	SMITH, BRIAN	
	<b>Examiner</b>	<b>Art Unit</b>	
	BRYAN EPPE	3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 9-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/19/06;8/23/07</u> .   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This is a first office action on the merits for application serial number 10/565,317 filed 1/19/2006. The office action is in response to the concurrently filed preliminary amendment. Claims 1-24 are pending. Claims 9-24 have been withdrawn under a restriction requirement.

### ***Election/Restrictions***

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-8, drawn to a concrete panel having a specific density.

Group II, claim(s) 9-16, drawn to a concrete panel wherein the frame includes at least one opening in the embedded portion of the frame.

Group III, claim(s) 17-23, drawn to drawn to a concrete panel wherein the frame includes at least one outer member fastened thereon.

Group IV, claim(s) 24, drawn to a combination of composite panels.

The inventions listed as Groups I-IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Groups I-III each include the common technical features in claim 1. However, the technical features of claim 1 do not constitute a special technical feature because they are not contributions over the prior art. In other words, the common feature (i.e. frame members having at least one tab embedded in concrete) to the claims of Group I-III is a known feature. U.S. Patent 4,602,467 cited in the International Search Report dated November 3, 2005, shows frame members having at least one tab embedded in concrete.

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2. During a telephone conversation with Ms. Laura Wanek on February 25, 2009 a provisional election was made without traverse to prosecute the invention of Group I, claim 1-8. Affirmation of this election must be made by applicant in replying to this Office action. Claims 9-24 have been withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Konski (U.S. Pat. 3,802,142) in view of Fu et al. (U.S. Pat. 5,494,513).

a. Claims 1-3. O'Konski discloses a prefab panel comprising:

- i. A frame including a plurality of spaced apart frame members 10, shown as a C-channel having a first flange extending perpendicularly from an end of the web portion including tab 11 and a similarly extending second flange from an opposing end of the web;
- ii. A reinforcing layer 13 fastened to the flange of the frame member via tongue 12; and
- iii. A concrete slab 14, wherein the slab 14 has a front and rear face, and further wherein the reinforcing layer 13 and flange, shown at 11 and

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12, are embedded in the slab 14, and another portion of the frame protrudes from the rear face of the slab 14 (Figs. 1-3).

O'Konski lacks wherein the concrete is aerated and has a density of between 400-1760 kg/m<sup>3</sup>. Fu et al. teaches it is known to aerate concrete compositions resulting in a density within the claimed range to provide a lightweight building material (Fu Col. 3 Lines 58-64). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the concrete of O'Konski with aerated concrete having a density within the claimed range to provide a lighter weight building material without sacrificing structural integrity.

b. Claim 4. O'Konski discloses wherein the first flange includes at least one tab 11 and tab-opening, shown as the void defined by the tab 11, wherein the concrete slab 14 extends through the opening (Figs. 1 and 2).

c. Claim 5. O'Konski discloses wherein the reinforcing layer 13 includes a slit and expanded metal lath (Col. 4 Lines 36-37).

d. Claim 6. O'Konski discloses wherein the panel includes at least one opening partially bounded by the frame members 10, interpreted as the void between slabs 14 and 16 (See Fig. 2).

e. Claims 7 and 8. O'Konski discloses wherein the panel includes at least one outer member 18 removably attached before and permanently attached after being spot welded (Col. 5 Lines 28-32) to the frame and bounding at least one edge of the panel (Fig. 3).

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### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRYAN EPPES whose telephone number is (571)270-3109. The examiner can normally be reached on M-F; alt. Fri. off (7:30am-5pm EST.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on (571) 272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Richard E. Chilcot, Jr./

Supervisory Patent Examiner, Art Unit 3635

/B. E./

Examiner, Art Unit 3635